World Population

An Analysis of Vital Data

Nathan Keyfitz and Wilhelm Flieger



THE UNIVERSITY OF CHICAGO PRESS CHICAGO & LONDON

Standard Book Number: 226–43234–3
Library of Congress Catalog Card Number: 68–14010

The University of Chicago Press, Chicago 60637
The University of Chicago Press, Ltd., London

© 1968 by The University of Chicago
All rights reserved. Published 1968. Second Impression 1970
Printed in the United States of America

TABLE 1
DATA

AGE AT LAST BIRTHDAY	POPULATION BOTH SEXES	MALES Number	MALES %	FEMALES Number	FEMALES %	BIRTHS BY AGE OF MOTHER	DEATHS BOTH SEXES	DEATHS MALES	DEATHS FEMALES	AGE AT LAST BIRTHDAY
0	10602	5326	3.2	5276	3.0	0	1344	728	616	0
1-4	48479	24304	14.4	24175	13.6	0	519	256	263	1-4
5-9	55667	28066	16.7	27601	15.6	0	69	43	26	5-9
10-14	40971	20697	12.3	20274	11.4	4	30	19	11	10-14
15-19	31196	15514	9.2	15682	8.8	1089	46	25	21	15-19
20-24	25278	11318	6.7	13960	7.9	3809	66	35	31	20-24
25-29	24017	11614	6.9	12403	7.0	4055	73	48	25	25-29
30-34	21020	10417	6.2	10603	6.0	3039	97	60	37	30-34
35-39	19913	9870	5.9	10043	5.7	2254	111	64	47	35-39
40-44	16097	7921	4.7	8176	4.6	866	143	88	55	40-44
45-49	14033	6938	4.1	7095	4.0	85	131	86	45	45-49
50-54	11490	5611	3.3	5879	3.3	4	169	108	61	50-54
55-59	8884	4105	2.4	4779	2.7	0	198	131	67	55-59
60-64	6390	2772	1.6	3618	2.0	0	208	128	80	60-64
65-69	4999	1931	1.1	3068	1.7	0	198	114	84	65-69
70-74	3389	1209	0.7	2180	1.2		199	102	97	70-74
75-79	2084	608	0.4	1476	0.8		174	71	103	75-79
80-84	1087	246	0.1	841	0.5	7697 M.	138	41	97	80-84
85+	415	68	0.0	347	0.2	7508 F.	88	17	71	85+
TOTAL	346011	168535		177476		15205	4001	2164	1837	TOTAL

TABLE 2
MALE LIFE TABLE

x	${}_nq_x$	l_x	${}_nd_x$	${}_nL_x$	${}_nm_x$	${}_na_x$	T_x	r_x	$\dot{e}_x$	${}_nM_x$	x
0	0.124721	100000	12472	91245	0.136688	0.2981	5220976	0.0000	52.210	0.136688	0
1	0.040904	87528	3580	339898	0.010533	1.1474	5129731	0.0000	58.607	0.010533	1
5	0.007368	83948	618	418192	0.001479	2.5003	4789833	0.0322	57.057	0.001532	5
10	0.004589	83329	382	415702	0.000920	2.5318	4371641	0.0581	52.462	0.000918	10
15	0.008160	82947	677	413226	0.001638	2.7727	3955939	0.0586	47.692	0.001611	15
20	0.015418	82270	1268	408383	0.003106	2.6612	3542713	0.0260	43.062	0.003092	20
25	0.020475	81002	1658	401067	0.004135	2.6240	3134329	0.0040	38.695	0.004133	25
30	0.028428	79343	2256	391245	0.005765	2.5749	2733262	0.0108	34.449	0.005760	30
35	0.032040	77087	2470	379636	0.006506	2.6512	2342017	0.0200	30.381	0.006484	35
40	0.054251	74618	4048	363340	0.011141	2.5921	1962381	0.0250	26.299	0.011110	40
45	0.060349	70569	4259	342637	0.012429	2.6026	1599041	0.0209	22.659	0.012396	45
50	0.092664	66311	6145	317174	0.019373	2.6598	1256404	0.0321	18.947	0.019248	50
55	0.149131	60166	8973	279339	0.032121	2.6047	939230	0.0382	15.611	0.031912	55
60	0.208137	51193	10655	229641	0.046400	2.5293	659891	0.0393	12.890	0.046176	60
65	0.258256	40538	10469	176485	0.059321	2.4969	430250	0.0393	10.613	0.059037	65
70	0.349118	30069	10498	123754	0.084827	2.4669	253765	0.0393	8.439	0.084367	70
75	0.449779	19571	8803	74967	0.117422	2.3997	130012	0.0393	6.643	0.116776	75
80	0.581284	10769	6260	37299	0.167821	2.3571	55045	0.0393	5.112	0.166666	80
85+	*1.000000	4509	4509	17745	0.254093	3.9356	17745	0.0393	3.936	0.250000	85+

TABLE 3
FEMALE LIFE TABLE

x	${}_nq_x$	l_x	${}_nd_x$	${}_nL_x$	${}_nm_x$	${}_na_x$	T_x	r_x	$\dot{e}_x$	${}_nM_x$	x
0	0.108158	100000	10816	92637	0.116755	0.3192	6001393	0.0000	60.014	0.116755	0
1	0.042218	89184	3765	346094	0.010879	1.1733	5908756	0.0000	66.253	0.010879	1
5	0.004400	85419	376	426155	0.000882	2.5000	5562662	0.0341	65.122	0.000942	5
10	0.002736	85043	233	424675	0.000548	2.6751	5136507	0.0557	60.399	0.000543	10
15	0.006738	84810	571	422769	0.001352	2.7548	4711832	0.0360	55.557	0.001339	15
20	0.011058	84239	932	418922	0.002224	2.5597	4289063	0.0215	50.915	0.002221	20
25	0.010063	83307	838	414546	0.002022	2.6242	3870141	0.0251	46.456	0.002016	25
30	0.017355	82469	1431	408985	0.003499	2.6518	3455595	0.0177	41.902	0.003490	30
35	0.023212	81038	1881	400736	0.004694	2.6320	3046610	0.0211	37.595	0.004680	35
40	0.033138	79157	2623	389335	0.006737	2.5410	2645874	0.0286	33.426	0.006727	40
45	0.031328	76534	2398	376914	0.006361	2.5997	2256540	0.0256	29.484	0.006342	45
50	0.050860	74136	3771	361755	0.010423	2.6328	1879626	0.0294	25.354	0.010376	50
55	0.068219	70366	4800	340481	0.014099	2.6361	1517871	0.0335	21.571	0.014020	55
60	0.105347	65565	6907	311136	0.022200	2.5835	1177390	0.0312	17.957	0.022112	60
65	0.129021	58658	7568	275082	0.027512	2.5940	866254	0.0312	14.768	0.027379	65
70	0.202012	51090	10321	230614	0.044754	2.5936	591172	0.0312	11.571	0.044495	70
75	0.299368	40769	12205	173876	0.070194	2.5444	360558	0.0312	8.844	0.069783	75
80	0.452473	28564	12925	111225	0.116201	2.5554	186681	0.0312	6.535	0.115339	80
85+	*1.000000	15640	15640	75456	0.207269	4.8246	75456	0.0312	4.825	0.204611	85+

TABLE 4
OBSERVED AND PROJECTED VITAL RATES

	OBSERVED POPULATION BOTH SEXES	OBSERVED POPULATION MALES	OBSERVED POPULATION FEMALES	PROJECTED POPULATION 1966 MALES	1966 FEMALES	1971 MALES	1971 FEMALES	1976 MALES	1976 FEMALES	STABLE POPULATION MALES	STABLE POPULATION FEMALES
RATES PER THOUSAND											
Birth	43.94	45.67	42.30	44.10	40.95	44.58	41.49	46.31	43.20	46.39	43.87
Death	11.56	12.84	10.35	12.91	10.51	12.77	10.37	12.78	10.39	13.31	10.80
Increase	32.38	32.83	31.95	31.19	30.44	31.81	31.12	33.53	32.81		33.0756
PERCENTAGE											
under 15	45.00	46.51	43.57	46.74	44.11	45.18	42.88	45.58	43.34	46.33	44.66
15-64	51.54	51.08	51.97	50.90	51.57	52.45	52.89	52.02	52.50	51.84	52.04
65 and over	3.46	2.41	4.46	2.36	4.32	2.36	4.24	2.39	4.16	1.83	3.30
DEP. RATIO X 100	94.04	95.79	92.41	96.46	93.92	90.64	89.09	92.22	90.48	92.90	92.16